

WATER SCREEN

Abstract

A traveling water screen comprising an endless foraminous belt with flights. The foraminous belt forms a water screen extending from a lower end in a flowing stream to an upper end above the surface of the stream. The stream flows through openings in the foraminous screen. The flights, which may be scoops, are arranged in spaced apart relation on the outer surface of the water screen. The water screen is driven in a direction so that its upstream portion advances upward and its downstream portion downward. The flights form inclined surfaces across the width of the screen from a point of highest elevation to one or more points of lowest elevation at one or both side edges of the screen. As the screen moves, the flights lift fish toward the surface. As a flight breaks the surface, fish slide down the inclined flights toward one or both side edges of the screen to be diverted safely. A second water screen having larger openings than the fish-removal water screen can be positioned upstream to filter out large debris and to protect the fish-removal water screen from heavy impacts in a two-stage filter.